

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-317. Canceled.

318. (Currently Amended) A method for performing operations over a network on at least one stainer connected in a LAN stainer network, comprising:
establishing a network connection with the at least one stainer in the LAN stainer network;
sending commands to the at least one stainer over the network connection; and
receiving responses corresponding to commands ~~sent to the at least one stainer over the network connection~~,
wherein operations are performed in response to instructions provided by at least one controller,
wherein the stainer network includes more than one controller located within the stainer network, and
wherein the stainer network connects to controllers located outside the stainer network via a bridge.

319. (Currently Amended) The method of claim 318, wherein the stainer network further includes a server and a plurality of stainers including the at least one

~~stainer, and wherein the at least one stainer is a client of the server method is executed on a server with individual stainers in the plurality of stainers as clients.~~

320. (Currently Amended) The method of claim 319, wherein the server includes a centralized database comprising configuration information for the individual client at least one stainer stainers.

321. (Currently Amended) The method of claim 318, wherein sending commands to the at least one stainer ~~in the LAN~~ further comprises one or more of the steps of:

relaying commands to the at least one stainer; and
relaying commands and queries to a database associated with the plurality of stainers, wherein the database comprises information including status information on about stainers, slides, consumables, and treatment protocols associated with the plurality of stainers.

322. (Currently Amended) The method of claim 321, further comprising relaying the wherein commands or commands and queries ~~are relayed to the database associated with the plurality of stainers~~ from a laboratory information system.

323. (Currently Amended) The method of claim 321, wherein the commands and queries ~~to the database associated with the plurality of stainers~~ further

comprise database maintenance operations including purging, compaction, and database back-up operations.

324. (Currently Amended) The method of claim 321, further comprising relaying commands or commands and queries to a different stainer when the at least one stainer malfunctions ~~wherein the method may be performed relative to other stainers in the LAN, in case of malfunction of a stainer.~~

325. (Currently Amended) The method of claim 321, wherein sending commands further comprises ~~the actions are performed~~ using a software tool that also provides a defined interface through which operations may be performed on the at least one stainer ~~over the network.~~

326. (Currently Amended) The method of claim 318, wherein receiving responses ~~corresponding to commands sent to the at least one stainer over the LAN~~ further comprises one or more of the steps of:

receiving responses to queries to a database associated with the plurality of stainers, wherein the database comprises information including status information about stainers, slides, consumables, and treatment protocols associated with the plurality of stainers; and

receiving responses to commands from the at least one stainer.

327. (Currently Amended) The method of claim 326, where the responses are further returned from the database to a laboratory information system ~~in response to queries relayed to the database from the laboratory information system.~~

328. (Currently Amended) The method of claim 327, wherein the communication between the at least one stainer and with the laboratory information system is facilitated by ~~a network~~ the bridge.

329. (Currently Amended) The method of claim 325, wherein ~~where~~ the software tool is a web browser.

330. (Currently Amended) The method of claim 318, ~~wherein the operations performed over the network on the at least one stainer include~~ further comprising running diagnostic tests and retrieving diagnostic information .

331. (Currently Amended) The method of claim 330, further comprising ~~running~~ wherein the diagnostic tests are ~~used to actively exercise components on the at least one stainer.~~

332. (Currently Amended) The method of claim 330, further comprising wherein the diagnostic tests are ~~used to troubleshoot~~ troubleshooting the stainer.

333. (Currently Amended) The method of claim 330, further comprising ~~wherein an operator is~~ electronically notifying an operator notified about the results of the diagnostic tests.

334. (Currently Amended) The method of claim 330, wherein the an operator operating the at least one controller is remotely located.

335. (Currently Amended) The method of claim 318, further comprising wherein performing the operations ~~performed over the network~~ on the at least one stainer ~~may be performed~~ while operating other stainers in the LAN stainer network ~~are operating and~~, wherein the operations of the other stainers ~~are not~~ without materially affected by the operations of the at least one stainer ~~affecting the operations of the other stainers in the LAN.~~

336. (Currently Amended) The method of claim 318, further comprising wherein the operations ~~performed over the network on the at least one stainer~~ include monitoring the status of slides being processed by the at least one stainer ~~apparatus.~~

337. (Currently Amended) The method of claim 318, further comprising wherein the operations ~~performed over the network on the at least one stainer~~ include obtaining a real-time estimate of the completion time of ~~any of the slides~~ a slide being processed by the at least one stainer.

338. (Currently Amended) The method of claim 318, further comprising encrypting commands and responses ~~wherein data~~ sent over the network connection is encrypted.

339. (New) A method for performing operations over a network on at least one stainer connected in a LAN stainer network, comprising:

establishing a network connection with the at least one stainer in the LAN stainer network;

sending commands to the at least one stainer over the network connection and performing one or more of the steps of:

relaying commands to the at least one stainer, and

relaying commands and queries to a database associated with the plurality of stainers from a laboratory information system, wherein the database comprises information including status information on stainers, slides, consumables, and treatment protocols associated with the plurality of stainers; and

receiving responses corresponding to commands sent to the at least one stainer over the network connection.

340. (New) The method of claim 339, wherein the stainer network further includes a server and a plurality of stainers including the at least one stainer, and wherein the at least one stainer is a client of the server.

341. (New) The method of claim 340, wherein the server includes a centralized database comprising configuration information for the at least one stainer.

342. (New) The method of claim 339, wherein the commands and queries further comprise database maintenance operations including purging, compaction, and database back-up operations.

343. (New) The method of claim 339, further comprising relaying commands or commands and queries to a different stainer when the at least one stainer malfunctions.

344. (New) The method of claim 339, wherein sending commands further comprises using a software tool that also provides a defined interface through which operations may be performed on the at least one stainer.

345. (New) The method of claim 339, wherein receiving responses further comprises one or more of the steps of:

receiving responses to queries to a database associated with the plurality of stainers, wherein the database comprises information including status information about stainers, slides, consumables, and treatment protocols associated with the plurality of stainers; and

receiving responses to commands from the at least one stainer.

346. (New) The method of claim 345, where the responses are further returned from the database to a laboratory information system.

347. (New) The method of claim 346, wherein communication between the at least one stainer and the laboratory information system is facilitated by the bridge.

348. (New) The method of claim 344, wherein the software tool is a web browser.

349. (New) The method of claim 339, further comprising running diagnostic tests and retrieving diagnostic information.

350. (New) The method of claim 349, further comprising running diagnostic tests to actively exercise components on the at least one stainer.

351. (New) The method of claim 349, further comprising troubleshooting the stainer.

352. (New) The method of claim 349, further comprising electronically notifying an operator about the results of the diagnostic tests.

353. (New) The method of claim 349, wherein an operator operating the at least one controller is remotely located.

354. (New) The method of claim 339, further comprising performing the operations on the at least one stainer while operating other stainers in the stainer network, wherein the operations of the other stainers are not materially affected by the operations of the at least one stainer.

355. (New) The method of claim 339, further comprising monitoring the status of slides being processed by the at least one stainer.

356. (New) The method of claim 339, further comprising obtaining a real-time estimate of the completion time of a slide being processed by the at least one stainer.

357. (New) The method of claim 339, further comprising encrypting commands and responses sent over the network connection.